

## Product environmental attributes – THE ECO DECLARATION

The declaration may be published only when all rows and/or fields marked with an \* are filled-in (n.a. for not applicable). Additional information regarding each item may be found under P14.

Brand *	Lenovo	Logo		
Company name *	Lenovo			
Contact information *	Lenovo Global Environmental Affairs Alvin L Carter 1009 Think Place Building 2 / 5J3 Morrisville, North Carolina 27560 alcarter@lenovo.com	lenovo		
Internet site *	http://www.lenovo.com/social_responsibility/us/en/environment.html			
Additional information	The latest version of this document can be found at http://www.lenovo.com/social_responsibility/us/en/datasheets_u			

	The company declares (based on product specification or test results based obtained from sample testing), that the product conforms to the statements given in this declaration.					
Type of product *	Traditional Desktop					
Commercial name *	deaCentre K415					
Model number *	0090; 2556; 4748					
Issue date *	2014-06-03					
Intended market *	🛛 Global 🗌 Europe 🗌 Asia, Pacific & Japan 🗌 Americas 🗌 Other					
Additional information						

This is an uncontrolled copy when in printed form. Please refer to the contact information for the latest version.

Quality	equireme	ent met	
Item		Yes	No
QC1 *	The company enforces an internal quality control scheme to ensure the correctness of this eco declaration	$\boxtimes$	
QC2 *	The company is a member of an eco declaration system that enforces regular independent quality control such as organized by IT-Företagen (see www.itecodeclaration.org).	$\square$	

Model number *	IdeaCentre K415	MT:10090
Issue date *	2014-06-03	

2556 4748

lenovo

Product	environmental attributes - Legal requirements	Require	ment	met
Item		Yes	No	n.a.
P1	Hazardous substances and preparations			
P1.1*	Products do not contain more than; 0.1% lead, 0.01% cadmium, 0.1% mercury, 0.1% hexavalent chromium, 0.1% polybrominated biphenyls (PBB) or 0.1% polybrominated diphenyl ethers (PBDE). (See legal reference and Note B1)			
P1.2*	Products do not contain Asbestos (see legal reference). Comment: Legal reference has no maximum concentration value.	$\boxtimes$		
P1.3*	Products do not contain Ozone Depleting Substances: Chlorofluorocarbons (CFC), hydrobromofluorocarbons (HBFC), hydrochlorofluorcarbons (HCFC), Halons, carbontetrachloride, 1,1,1- trichloroethane, methyl bromide (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.4*	Products do not contain more than; 0.005% polychlorinated biphenyl (PCB), 0.005% polychlorinated terphenyl (PCT) in preparations (see legal reference).	$\boxtimes$		
P1.5*	Products do not contain more than 0.1% short chain chloroparaffins (SCCP) with 10-13 carbon atoms in the chain containing at least 48% per mass of chlorine in the SCCP (see legal reference).	$\boxtimes$		
P1.6*	Textile and leather parts with direct skin contact do not contain Tri-(2,3,-dibromopropyl)-phosphate (TRIS), Tris-(aziridinyl)-phosphineoxide (TEPA), polybrominated biphenyl (PBB) (see legal reference). Comment: Legal reference has no maximum concentration values.			$\square$
P1.7*	Textile and leather parts with direct skin contact do not contain more than 0.003% Azo colorants that split aromatic amines. (See legal reference and Note B1)			$\boxtimes$
P1.8*	Wooden parts do not contain arsenic and chromium as a wood preservation treatment as well as pentachlorophenol and derivatives (see legal reference). Comment: Legal reference has no maximum concentration values.			
P1.9*	Parts with direct and prolonged skin contact do not release nickel in concentrations above 0.5 microgram/cm <sup>2</sup> /week (see legal reference). Comment: Max limit in legal reference when tested according to EN1811:1998.			
P1.10*	REACH Article 33 information about substances in articles is available at (add URL or mail contact): http://www.lenovo.com/social_responsibility/us/en/ThinkGreen_products.html#environment			
P2	Batteries			
P2.1*	If the product contains a battery or an accumulator, it is labeled with the disposal symbol and if it contains more than 0.0005% of mercury (for button cells only) by weight, or more than 0.004% of lead, it shall be marked with the chemical symbol for the metal concerned, Hg or Pb. Information on proper disposal is provided in user manual. (See legal reference)			
P2.2*	Button cells used in the product do not contain more than 2% by weight of mercury. Other batteries or accumulators do not contain more than 0.0005% of mercury or 0.002% of cadmium. (See legal reference)	$\boxtimes$		
P2.3*	Batteries and accumulators are easily removable by either users or service providers (as dependent on the design of the product). Exception: Batteries that are permanently installed for safety, performance, medica or data integrity reasons do not have to be "easily removable". (See legal reference)			
P3	Safety, EMC connection to the telephone network and labeling			
P3.1*	The product complies with legally required safety standards as specified (see legal reference).	$\boxtimes$		
P3.2*	The product complies with legally required standards for electromagnetic compatibility (see legal reference).	$\boxtimes$		
P3.3*	If product is intended for connection to a public telecom network or contains a radio transmitter, it complies with legally required standards for radio and telecommunication devices (see legal reference).	s 🔀		
P3.4*	The product is labeled to show conformance with applicable legal requirements (see legal reference).	$\boxtimes$		
P4	Consumable materials			
P4.1*	If a photo conductor (drum, belt etc.) is used in the product, it does not contain cadmium max 0.01% (see legal reference and Note B1).			$\boxtimes$
P4.2*	If ink/toner is used in the product, it does not contain cadmium max 0.1% by weight (see legal reference).			$\square$
P4.3*	If the ink/toner formulation/preparation is classified as hazardous according to applicable regulations, the product/packaging is adequately labeled and a Safety Data Sheet (SDS) in accordance with these requirements is available (see legal reference).			
P5	Product packaging			
P5.1*	Packaging and packaging components do not contain more than 0.01% lead, mercury, cadmium an hexavalent chromium by weight of these together.	id 🔀		
P5.2*	Plastic packaging material is marked according to ISO 11469 referring ISO 1043 (see legal reference).	$\square$		
P5.3*	The product packaging material is free from ozone depleting substances as specified in the Montrea Protocol (see legal reference). Comment: Legal reference has no maximum concentration values.	al 🔀		

Note B1: Restriction applies to the homogeneous material, unless other specified and expressed in weight %.

Model n	<sup>Model number *</sup> IdeaCentre K415 MT:10090 2556 4748						
Issue da	ssue date * 2014-06-03 Logo						
Produc	t environ	mental attributes - Market requirements - Environmental conscious design	Requ	iren	nent	met	
Item		atory to fill in. Additional information regarding each item may be found under P14.	Ye		No	n.a.	
P6		nt information		-	-		
P6.1*	Informat	on for recyclers/treatment facilities is available (see legal reference).		$\triangleleft$			
P7	Design						
		mbly, recycling					
P7.1*		t have to be treated separately are easily separable	$\geq$	3			
P7.2*	Plastic n	naterials in covers/housing have no surface coating.			$\boxtimes$		
P7.3*	Plastic p	arts >100g consist of one material or of easily separable materials.	$\geq$	3			
P7.4*	Plastic p	arts >25g have material codes according to ISO 11469 referring ISO 1043.	$\triangleright$	1			
P7.5	Plastic p	arts are free from metal inlays or have inlays that can be removed with commonly available tool	s. >	1	Ē	Ē	
P7.6*		re easily separable. (This requirement does not apply to safety/regulatory labels).			Ħ	Ħ	
	Product			<u> </u>			
P7.7*		ig can be done e.g. with processor, memory, cards or drives	Þ	1			
P7.8*		g can be done using commonly available tools			Ħ	H	
P7.9.						╞	
P7.10		arts are available after end of production for: 5 years				┝┝	
F7.10		s available after end of production for: 5 years					
P7.11*		and substance requirements cover/housing material type:					
F7.11		type: ABS Material type: STEEL Material type: PMM	•				
P7.12		I cable insulation materials of power cables are PVC free.	·	1	$\boxtimes$		
P7.13		I cable insulation materials of signal cables are PVC free		-		╞	
P7.14		/housing plastic parts >25g are free from chlorine and bromine.		7	<u> </u>	╞	
			2			┝	
P7.15	Note B2		See				
P7.16	Flame re Marking:	tarded plastic parts >25g in covers / housings are marked according ISO 1043-4:	$\triangleright$	3			
P7.17		I specifications of flame retardants in printed circuit boards >25g (without components): additive) , TBBPA (reactive) , Other; chemical name:, CAS #:		]			
	Chemica ISO 104	I specifications of flame retardants in printed circuit boards (without components) >25g accordir 3-4:	ig [	3			
P7.18		etarded plastic parts >25g contain the following flame retardant substances/preparations ations above 0.1%:	s in	]			
	Provide complete 1. Chem	nt: No legal limits exist, this is a market requirement. a list of all used flame retardants including MSDS for each flame retardant. The list must con e chemical name, CAS number and supplier. ical name: , CAS #: , Supplier: ical name: , CAS #: , Supplier:	tain				
	3. Chem Alt. 2	I specifications of flame retardants in plastic parts >25g according ISO 1043-4:	D	3			
P7.19		arts >25g are free from flame retardant substances/ preparations above 0.1% classified as R45 5, R48, R50, R51, R53, R60, R61 and any combination of these (See Note B3)	, D	3			
P7.20		plastic parts' weight >25g, recycled material content is 0%.					
P7.21		plastic parts' weight >25g, biobased material content is 0%.					
P7.22	Light sou	irces are free from mercury					
P8	Batterie						
P8.1*		hemical composition:				$\square$	
P8.2	Batteries	meet the requirements of the following voluntary program/s:				X	

Note B2: IEC61249-2--21 has maximum limits for chlorine and bromine but does not address fluorine, iodine and astatine which are included in the group of halogens.

Note B3: 'Starting from January 2009, Risk phrases can be replaced by Hazard phrases according to the Globally Harmonized System (GHS), mandatory by December 2010.

Model number *		ntre K415		IVI I :100	90 2556 4748	
Issue date *	2014-06-03				Logo <b>lenovo</b> .	
Product enviror	nmental attrib	utes - Market r	equirements (	(continued)	Requirement	me
tem					Yes No	n.a
P9 Energy	y consumption					
		owing power level I w/ WOL Enabled		sumptions are rep	ported: See P14	
Energy mode *		Power level at 100 V AC	Power level a 115 V AC	at Power level 230 V AC	at Reference / Standard for energy modes and test method *	
		W	W	W		
Category 0						
Short Idle State -	WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration (P <sub>idle</sub> )	
Long Idle State -	WOL Enabled	W	W	W	Use for ENERGY STAR V6 registration (P <sub>idle</sub> )	
Sleep (S3) - WOL	Enabled	W	W	W	Use for ENERGY STAR V6 registration(P <sub>sleep</sub> )	
Sleep (S3) - WOL	Disabled	W	W	W	Reference	
Off (S5) - WOL En		W	W	W	Use for ENERGY STAR V6 registration(Poff)	
Off (S5) - WOL Di		W	W	W	Use for EuP	
Category I1						
Short Idle State -	WOL Enabled	W	W	W	Use for Energy Star V6.0 registration(P <sub>ShortIdle</sub> )	
Long Idle State -	WOL Enabled	W	W	W	Use for Energy Star V6.0 registration(PLongidie)	
Sleep (S3) - WOL		W	W	W	Use for Energy Star V6.0 registration (P <sub>sleep</sub> )	
Sleep (S3) - WOL		w	W	W	Reference	
Off (S5) - WOL En		w	W	W	Use for Energy Star V6.0 registration (P <sub>off</sub> )	
Off (S5) - WOL Di		W	W	W	Use for EuP	
	Sabled	vv	vv	vv	Use for Eur	
Category 12						
Short Idle State -		W	W	W	Use for Energy Star V6.0 registration(P <sub>ShortIdle</sub> )	
Long Idle State -		W	W	W	Use for Energy Star V6.0 registration(P <sub>Longldle</sub> )	
Sleep (S3) - WOL		W	W	W	Use for Energy Star V6.0 registration (P <sub>sleep</sub> )	
Sleep (S3) - WOL		W	W	W	Reference	
Off (S5) - WOL En		W	W	W	Use for Energy Star V6.0 registration (Poff)	
Off (S5) - WOL Di	sabled	W	W	W	Use for EuP	
Category I3						
Short Idle State -	WOL Enabled	W	W	W	Use for Energy Star V6.0 registration(P <sub>ShortIdle</sub> )	
Long Idle State -	WOL Enabled	W	W	W	Use for Energy Star V6.0 registration(PLongIdle)	
Sleep (S3) - WOL	Enabled	W	W	W	Use for Energy Star V6.0 registration (P <sub>sleep</sub> )	
Sleep (S3) - WOL	Disabled	W	W	W	Reference	
Off (S5) - WOL En	nabled	W	W	W	Use for Energy Star V6.0 registration (Pott)	
Off (S5) - WOL Di	sabled	W	W	W	Use for EuP	
Category D1					I	
Short Idle State -	WOL Enabled	W	W	W	Use for Energy Star V6.0 registration(P <sub>ShortIdle</sub> )	
Long Idle State -		W	w	W	Use for Energy Star V6.0 registration(P <sub>Longldle</sub> )	
Sleep (S3) - WOL		W	W	W	Use for Energy Star V6.0 registration (P <sub>sleep</sub> )	
Sleep (S3) - WOL		W	W	W	Reference	
Off (S5) - WOL En		W	W	W	Use for Energy Star V6.0 registration (P <sub>off</sub> )	
						┝
Off (S5) - WOL Di	รสมเซนิ	W	W	W	Use for EuP	
Category D2						
Short Idle State -		W	W	W	Use for Energy Star V6.0 registration(P <sub>ShortIdle</sub> )	L
Long Idle State -		W	W	W	Use for Energy Star V6.0 registration(P <sub>Longldle</sub> )	
Sleep (S3) - WOL	Enabled	W	W	W	Use for Energy Star V6.0 registration (P <sub>sleep</sub> )	
Sleep (S3) - WOL	Disabled	W	W	W	Reference	
Off (S5) - WOL Er	nabled	W	W	W	Use for Energy Star V6.0 registration (Poff)	
Off (S5) - WOL Di	sabled	W	W	W	Use for EuP	

plugged in	ad oower supply / charge the wall outlet but ed from the product.)		W	W			
TEC Typical En	ergy Consumption	kWh/week	kWh/week	kWh/week			
ETEC * Annual End	ergy Consumption	kWh/year	kWh/year	kWh/year	$E_{TEC} = (8760/1000) \times (P_{off} \times 0.45 + P_{sleep} \times 0.05 + P_{shortIdle} \times 0.35 + P_{LongIdle} \times 0.15)$		
		P <sub>off</sub> : Off Mode(S5)	) - WOL Enabled;	P <sub>sleep</sub> : Sleep Mode(S	3) - WOL Enabled; P <sub>idle</sub> : Idle State - WOL Enabled		
Display res	solution : Megapixel	S					
Print Spee	Print Speed : Images per minute						
Default tim	Default time to enter energy save mode: 30 minutes						
P9.2*	Information about th	e energy save funct	ion is provided	with the product.			
P9.3*	The product meets t ENERGY STAR® ve Others specify:		ents of the follo uct category:	wing voluntary prog	ram/s:		
P10	Emissions						
	Noise emission –		o ISO 9296				
P10.1	Mode Mo	ode description		Declared A-weighted sound power	Declared A-weighted sound pressure level $L_{pAm}$ (dB)		
				level $L_{WAd}$ (E	Desktop 🔀		
					or Desk side (only if product is not operator attended)		
	Idle *	HDD: Idle		* 4.0	30		
	Operation *	HDD: Operating		* 4.0	30		
	Other mode						
	Measured according to: ISO7779 ECMA-74 Other (only if not covered by ECMA-74 with Lnam measurement distance m)						
P10.2	Other   Only if not covered by ECMA-74 with LpAm measurement distance   m)     The product meets the acoustic noise requirements of the following voluntary program/s:   Image: Content of the following voluntary program of the follo						

Model number *	IdeaCentre K415	MT:10090 2556 4748	
Issue date *	2014-06-03	Logo	lenovo

FIOUUCI	environmental attributes - Market requirements (continued)	Require	ment	me	
ltem		Yes	No	n.a	
	Chemical emissions from printing products				
P10.3*	Test performed according to ECMA-328 (ISO/IEC 28360) standard 📃, other specify:			$\ge$	
P10.4	Typical emission rate (print phase) is (mg/h):				
	Dust Ozone Styrene Benzene TVOC				
P10.5	Chemical emission requirements of the following voluntary program/s are met for :			$\geq$	
	Dust Ozone Styrene Benzene TVOC				
	Electromagnetic emissions				
P10.6	Computer display meets the requirement for low frequency electromagnetic fields of the following voluntary program/s:			$\ge$	
P11	Consumable materials for printing products				
P11.1*	A Safety Data Sheet (SDS) is available for the ink/toner preparation, even if not legally required (see P4.3).			$\times$	
P11.2*	Paper containing post-consumer recycled fibers can be used, provided that it meets the requirements of EN12281.	of 🗌		$\geq$	
P11.3*	2-sided (duplex) printing/copying is an integrated product function.				
P12	Ergonomics for computing products				
P12.1*	The display meets the ergonomic requirements of ISO 9241-307 for visual display technologies.	$\square$			
P12.2*	The physical input device meets the requirements of ISO 9995 and ISO 9241-410.		$\square$		
P13	Packaging and documentation				
P13.1*	Product packaging material type(s):FORMTEXT Corrugated cardboardweight (kg): 1.57Product packaging material type(s):EPEweight (kg): 0.575weight (kg): 0.575Product packaging material type(s):weight (kg):weight (kg):Product packaging material type(s):weight (kg):weight (kg):Product packaging material type(s):weight (kg):weight (kg):				
P13.2*	Product plastic packaging is free from PVC.	$\boxtimes$			
P13.3*	Specify media for user and product documentation (tick box): Electronic , Paper , Other			Ē	
P13.4*	For paper user and product documentation, please specify contained percentage of post-consumer recycled fiber: 0% (Japan only 70%)				
P14	Additional information (See Note B4)				
	Additional information (See Note B4) NOTE: Supplier makes no representations, guarantees, assurances or warranties whether express or implied, regarding the information contained in this document. All information provided by supplier in this document is provided based on supplier's knowledge available at the time of completion, and supplier shall have no obligation to update such information. The information provided here is approximate and provided for informational purposes only. See a Lenovo Account Representative for more information.				

Note B4: Additional lines may be inserted to declare further items, by positioning the cursor at the far right of the row and hitting the <Enter> key.

## Legal references Europe Annex B

Reference	Declaration item
2002/95/EC (ROHS Directive)	P1.1, P4.1
REACH, Annex XVII	P1.6, P1.8, P4.2
REACH, Annex XVII	P1.4
REACH, Annex XVII	P1.2
REACH, Annex XVII	P1.7
REACH, Annex XVII	P1.9
Regulation (EC) No. 2037/2000, 2038/2000, 2039/2000	P1.3
Norwegian regulation relating to restrictions on the use of certain dangerous chemicals 20.12.2002	P1.5
2006/66/EC (Battery and accumulators Directive)	P2.1, P2.2, P2,3, P3.4, P8.1
2006/95/EC (Low Voltage Directive)	P3.1, 3.4
2004/108/EEC (New EMC Directive)	P3.2, 3.4
1999/5/EC (R&TTE Directive)	P3.3, 3.4
"REACH" Regulation (1907/2006), annex VII	P1.10
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P4.3
REACH article 31, annex II	P4.3
2004/12/EC (Directive on packaging and packaging waste)	P5.1
(97/129/EC) (Commission Decision on Identification System for Packaging Materials	P5.2
2037/2000/EC Regulation on Substances that Deplete the Ozone Layer	P5.3
2002/96/EC (WEEE directive)	P3.4, P6.1
(EC) No.1272/2008 regulation on classification, labeling and packaging (CLP)	P7.19

## Lenovo ErP Lot3 Information Sheet - PC / Notebook -

As required by COMMISSION REGULATION (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers (ErP Lot3).

## Products scope of this sheet:

Desktop computer, integrated desktop computer, and notebook computer

This document is only valid in connection with the IT Eco Declaration of the specific Product.

Commercial name	IdeaCentre K415	Logo	
Model Number	10090 2556 4748	_	
Issue Date	2014-06-03	lenovo	
Additional information	Only 4748 is Erp Lot3 Qualified, which is equipped with ES PSU.		

P7.1.1 Product environmental attributes										
( 1)	<u> </u>									
(d)	Year of manufacture:	Availible on product label								
(e)	<b>E TEC value</b> (kWh) and capab <b>are disabled</b> and if the system display:	N/A								
(f)	E TEC value (kWh) and capab are enabled: Cat. B 188.75 Cat. D 182.83									
(g)	idle state power demand (Watt	52.11								
(h)	sleep mode power demand (W	3.28								
(i)	sleep mode with WOL enabled	3.29								
(j)	off mode power demand (Watt	0.98								
(k)	off mode with WOL enabled po	1.00								
(I)	Internal power supply efficiency at 10 %, 20 %, 50 % and 100 % of rated output power (if applicable):									
	10% 20% <i>83.96%</i> 5									
(m)	External power supply efficience	N/A								
		% 100% Aver	age ;							
(0)	or Level: The minimum number of loadir computers):	N/A								
(f)	Test parameters for measurements: — test voltage in V and frequency in Hz, — total harmonic distortion of the electricity supply system, — information and documentation on the instrumentation, set-up and circuits used for electrical testing:   Test voltage in V and frequency in Hz 230V/50Hz   Total harmonic distortion of the electricity supply system ≤ 2%   Information and documentation, set-up and circuits used for electrical testing   Instrument Range Used   Make and Model **   Type Or ***   AC Power Source 1~280VAC;1~550HZ;1000V   A. Full range   CASIO; HS-70W; SN:208Q08R									

		Power	r Meter	0~600V;0~20A	YOKOGAWA;WT210;SN:91M94456 0					
		Hvarothe	rmograph	15~35℃/15~90%	testo; 608-H1,SN:1034895602					
			nemometer	0~20m/s,-20~70℃	Testo;425;SN:02591883					
		Light M	easuring	1°;1-300cd/ m <sup>2</sup>	Konica Minolta;LS-110;					
(p-1)			nent methodolo	gy used to determine inforn	nation mentioned in points (I) - internal	PSU				
	efficiency: 80 PLUS® Program									
(p-2)	The measurement methodology used to determine information mentioned in points (m) - external PSU efficiency:									
	N/A									
(p-3)	The measurement methodology used to determine information mentioned in points (o) – loadingcycles batteries:									
(p-4)	The measurement methodology used to determine information mentioned in maximum, idle, sleep, off mode power as defined in Point P9.1 in the Product IT Eco Declaration:									
IEC 62301										
(q)	(q) Sequence of steps for achieving a stable condition with respect to power demand::									
Power on -> Wait 5 minutes ->Stable condition										
(r) Description of how sleep and/or off mode was selected or programmed:										
Begin menu -> Power -> Select sleep or off mode										
(s)	(s) Sequence of events required to reach the mode where the equipment automatically changes to sleep and/or off mode:									
Control Panel->Power Options-> Change Settings-> Restore default settings for this plan										
(t) The <b>duration of idle state condition before the computer automatically reaches sleep mode</b> , or another condition which does not exceed the applicable power demand requirements for sleep mode (in minutes): <b>30 minutes</b>										
(u)	(u) The length of time after a period of user inactivity in which the computer automatically reaches a power mode that has a lower power demand requirement than sleep mode (in minutes): 45 minutes									
(v)	The length of time before the display sleep mode is set to activate after user inactivity (in minutes): 15 minutes									
(w)	(w) Information on the energy-saving potential of power management functionality:									
N/A										
(x)	User	informatic	on on how to ena	able the power management fu	inctionality:					
Refer to User Guide										
			y Information:							
Yes	No	n/a	This notebook user.	computer is operated by batte	ery/ies that cannot be accessed and replac	ed by a non-professional				
			The battery	[ies] in this product ca	nnot be easily replaced by users	themselves				
Additional information										